

ABSTRACT OF THE DISCLOSURE

5 A stackable package to create a 3-dimensional memory array using ball grid array technology. Specifically, memory chips are coupled to a pre-formed packages which have alignment features to allow for the stacking of the ball grid arrays. The alignment features are used to align and orient each package with respect to an adjacent package, substrate or printed circuit board. The alignment features also support the weight of the adjacent package during solder ball reflow to maintain stack height and parallelism between packages. Each memory device is serially connected to the adjacent memory device through the vias and solder balls on each package.